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OUTSTANDING HIGH SURFACE LITHIUM VALUES – NORTHERN CHILE SAMPLING PROGRAM

Speciality Metals International Limited (ASX: SEI, Speciality Metals or the Company) is very pleased to announce that its latest sampling program has obtained some outstanding sample results within its exploration concessions over parts of Salar de Pintados and Salar Bellavista, in the Atacama Region of Northern Chile.

Sampling:

SEI has obtained some outstanding sample results in its third round of sampling within its wholly owned concessions in Salars de Pintados and Bellavista in the Atacama region of Northern Chile (Figure 1).

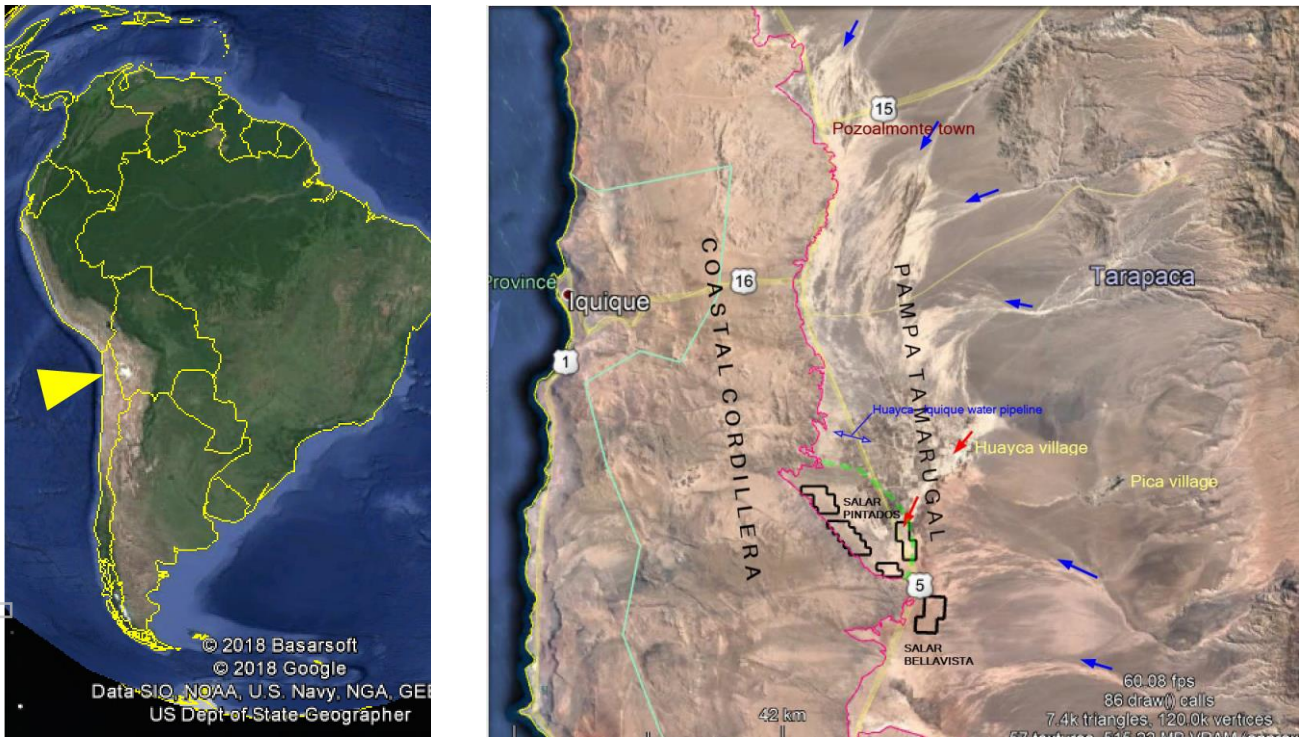


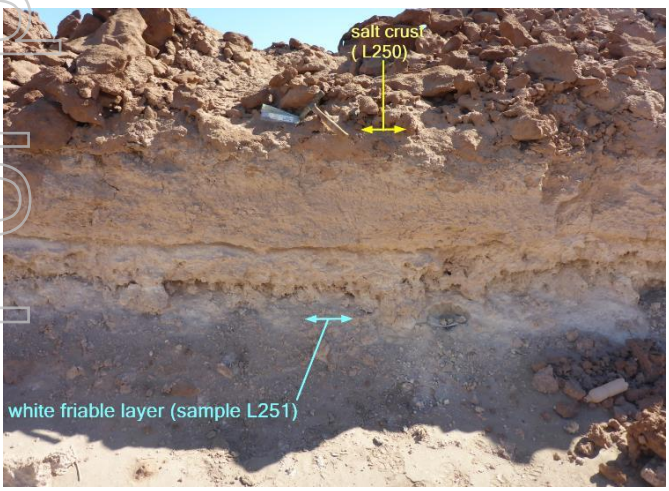
Figure 1. Location of SEI concessions Salar de Pintados and Bellavista in northern Chile

Sampling was focused on surface saline crusts showing strong evidence of evaporation of subsurface brines to the surface. In particular, a main anomalous population ranging from **400ppm to 2360ppm lithium** was obtained from samples along the western margin of Salar de Pintados and the northern margin of Salar Bellavista. These values fall within or exceed the range of lithium brine concentrations exploited by existing lithium brine producers and are one or more orders greater than lithium values in surface samples from Salar de Atacama, where currently a third of the world's lithium is produced.

The areas of very high lithium values are surrounded by larger areas of strongly anomalous lithium values ranging from 150ppm to 400ppm (Table 1). Confirmation of lithium concentrations in the subsurface will depend on drilling results but in the meantime the sample results appear to strongly confirm SEI's exploration model.

Table 1. Lithium, Boron, Potassium and Magnesium analyses of all samples taken in Salars de Bellavista and Pintados concessions held by SEI.

Salar Bellavista	Li ppm	B ppm	K %	Mg %	N (m)	E (m)
L237	172	130	0.5	0.7	7713613	436769
L248	171	100	0.5	1.1	7714931	436292
L236	162	150	0.3	1.0	7713613	436769
L246	115	490	0.6	1.0	7714931	436292
L243	103	60	0.6	0.8	7711588	437493
L244	102	40	0.3	0.3	7710823	437823
L242	81	70	0.2	0.4	7711588	437493
L245	77	60	0.6	0.8	7710823	437823
L238	73	70	0.2	0.4	7712550	437149
L235	68	60	0.2	0.2	7713613	436769
L247	40	150	0.3	0.4	7714931	436292
Salar Pintados	**Li ppm**	**B ppm**	**K %**	**Mg %**	**N (m)**	**E (m)**
L455	2630	180	2.0	0.1	7733769	416437
L252	1330	2240	4.4	0.7	7720461	432497
L462	1290	200	3.1	0.6	7728429	422833
L459	1080	170	2.9	0.6	7729969	420971
L460	900	230	1.5	0.5	7729143	421973
L60	820	3490	2.2	0.5	7725118	433196
L253	780	2420	2.0	1.0	7720838	431939
L458	590	190	1.9	0.5	7730501	420330
L468	338	5760	0.8	0.7	7724166	433597
L471	311	990	1.9	1.0	7722879	434151
L450	297	310	0.6	0.4	7731539	419306
L461	288	150	0.7	0.9	7728807	422374
L258	191	710	1.9	0.6	7727773	423627
L470	177	4420	0.6	1.0	7724166	433597
L472	151	390	1.2	0.6	7722879	434151
L454	109	100	0.5	0.4	7732628	417756
L257	87	590	1.4	0.4	7727027	424532
L256	55	440	0.7	0.5	7724501	427599
L456	21	30	0.1	0.2	7734351	415835



Northern part of **Salar Bellavista** (or Southern part of **Salar Pintados**): white friable layer (sample L251 - 331ppm Li) overlain by 0.75m thick salt crust – young – with cracks.

Salar Pintados - Sample L252 (salt crust - young - with cracks) - 1330ppm Li combined with 2240ppm B

It is anticipated that SEI may apply for more concessions as sampling outside its existing concessions has indicated further opportunities for lithium discovery.

At the same time the sampling has obtained some highly anomalous boron values ranging up to **7000ppm boron**. Analysis of the sample data indicates that the boron values are not related to lithium, that is, the boron values may indicate boron mineralisation separate to and in addition to potential lithium enrichment. Magnesium values in samples with high lithium content indicate acceptable levels of magnesium which if evaporation is used in any future lithium production, is potentially an important economic factor in lithium recovery.

Geophysical interpretation:

SEI has completed a geophysical interpretation of airborne magnetic data which indicates that SEI's concessions (15 over Salar de Pintados and 5 over Salar Bellavista) are ideally situated in the best part of the basins. SEI's interpretation of the magnetic data indicates that the modern salars conceal ancestral closed basins that are smaller than the modern day salars and are now the targets in SEI's lithium search. The ancestral basins were formed between complex basement highs that have a general west-south-west trend. SEI's concessions cover the parts of each ancestral basin where there is the greatest potential thickness of sedimentary fill (Figure 2).

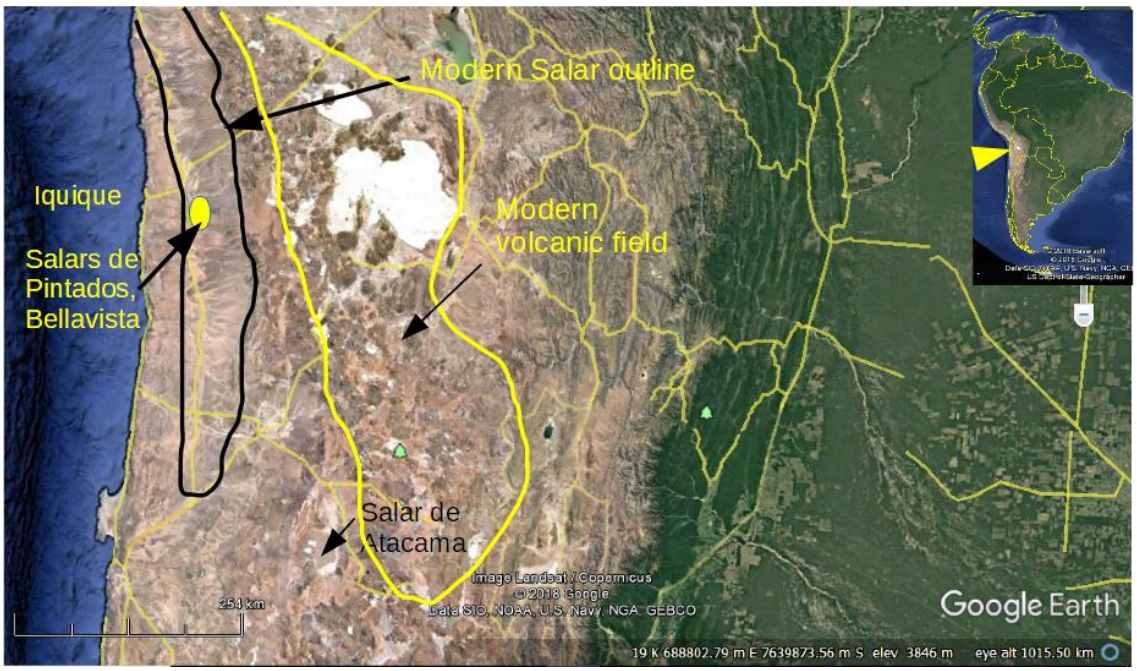


Figure 2. Location of Salars de Pintados and Bellavista with respect to modern salar (the Pampa Tamarugal).

At present, Salar de Pintados lies at the southern end of a very extensive closed basin (the Pampa Tamarugal) that extends north to the Peruvian border (Figure 2) and is separated from Salar Bellavista to the south by a relatively low divide. Both salars are at an elevation of around 1200m and are receiving sediment from the Andes mountain ranges to the east (which range in elevation from 2200m to 5500m).

Field reconnaissance indicates that beneath a relatively thin, recent evaporative and clastic sediment cover, the concealed ancestral basins are likely to contain several hundred metres of Rio Loa Formation, an evaporative, carbonate dominated sequence (Figure 3) that extends throughout the Atacama region as the main sedimentary fill in a series of enclosed basins. One of these, Salar de Atacama, hosts the brines exploited by the two major lithium producers in Chile, SQM and Albemarle. Apart from dominant evaporative carbonates (limestone and dolomite) the Rio Loa Formation contains lenses of coarse sand and gravels, probably laid down during flash flooding events in the past. These clastic lenses are anticipated to be the main aquifer from which any brines might be produced and drilling will be required to establish their extent, however surface exposures indicate that the lenses are likely to have excellent porosity and permeability characteristics for future brine production.

Figure 3. Exposure of Rio Loa Formation, southern margin of Salar de Atacama.

Drilling:

The next step in testing SEI's results will be a drilling program. Work is now focused on the selection of a drilling method that will safely deliver reliable samples and once this is done, identifying competent drilling contractors to tender for the work. The recent sample data and geophysical work will greatly assist planning for drill testing. The preferred drill targets will be the greatest thickness of sedimentary fill coincident with the strongest surface lithium sample anomalies, anticipating that this will provide firstly, a larger subsurface brine reservoir opportunity and secondly, that in general, brine grades as reported by existing producers appear to increase with depth in the sedimentary basin fill.

Executive Chairman of Speciality Metals, Mr Russell Krause, stated:

"The Board is extremely pleased with the latest sampling results, given that they not only appear to strongly confirm the Company's exploration model and geological theories, but it has also led to the identification other high-grade indicators outside of our existing concessions which the Company will seek to secure over the coming months."

"The Board will now actively work towards finalising and fine-tuning the targets for its upcoming drilling program and will seek to secure a drilling contractor to undertake this work in the near future."

"The Board and its geological team are confident that mineable quantities of lithium and other valuable mineral resources are still waiting to be discovered in Northern Chile, something that Speciality Metals is hoping to achieve as part of its exploration model.

Mr Krause added:

"This is an exciting time for the Company as it continues to prove-up and build upon its diversified exploration portfolio. We look forward to releasing further details regarding our Chilean exploration/drilling activities in the near future." Mr Krause concluded.

About Speciality Metals International Limited

Speciality Metals International Limited (ASX: SEI), formerly Carbine Tungsten Limited (ASX:CNQ) plans to be a pre-eminent Australian tungsten producer from the historic Mt Carbine tungsten mine in Far North Queensland.

The Company recently also expanded its exploration portfolio to include the following diversified projects:

- Lithium and other valuable mineral resources such as potassium, iodine and boron contained within subsurface brines within its Chilean exploration concessions;
- Gold Exploration Licences (Panama Hat and Crow Mt) in New South Wales, Australia;

Whilst

- Maintaining its world-class tungsten assets at Mt Carbine in Far North Queensland, Australia which consist of the Mt Carbine Tungsten Mine and the Iron Duke and Petersen's Lode Exploration Permits.

It aims to create shareholder value through the exploration and development of its current portfolio, whilst continuing to evaluate corporate and exploration opportunities within the speciality metals sector.

R H Krause
Executive Chairman
Speciality Metals International Limited

COMPETENT PERSON'S STATEMENT

The information in this report that relates to Exploration Results and Mineral Resources and Ore Reserves is based on information compiled by Dr Andrew White, who is a Fellow of the Australian Institute of Geoscientists and a consultant to Carbine. Dr White has sufficient experience relevant to the style of mineralisation, mining and processing the type of deposit under consideration to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Dr White consents to the inclusion of the matters based on his information in the form and context in which it appears.

JORC Code – Table 1

Section 1 - Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• In Salar Pintados samples of salt crust exposed at surface have been taken • Samples were taken as random rock (rock salt) chips • Samples were sent to ALS Geochemistry laboratory in Chile. • In the laboratory, standard sample preparation methods were used (crushing and pulverisation)
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Not applicable – no drilling undertaken.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Not applicable – no drilling undertaken.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Not applicable – no drilling undertaken.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*	• Not applicable – no drill samples taken, full description of sampling provided above.

Criteria	JORC Code explanation	Commentary
	• *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Samples have been assayed by ALS method ME-MS41 • 10% of samples were analysed as duplicates for QA/QC control.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Data storage in Excel spreadsheets and GIS database
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Sample location were surveyed using hand-held GPS
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Samples were collected at a spacing of the order of 0.1 to 1km
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Not applicable – no drilling undertaken and at present possible mineralisation-hosting not known but inferred from regional field reconnaissance.
Sample security	• *The measures taken to ensure sample security.*	• Samples were hand-delivered to ALS Chile by the geologist who collected the samples.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• There has been no external audit or review of the Company's techniques or data.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• 15 concessions granted in Salar de Pintados, 5 in Salar Bellavista and 5 in Salar Miraje • Each concession measures 1kmx3km, held for 2 years. • No known impediments for future exploration and development
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• No information for any prior exploration is available • In vicinity of Exploration Concessions Pintados 1 to 15 there are old Exploitation Concessions and small pits from which very small tonnage of a thin white borate rich layer were extracted
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Salt lake with a salt crust
Drill hole information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• Not applicable – no drilling undertaken.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Not applicable – no cut offs applied, assay values only limited by limits of detection and in the results reported in full in the text, no values below limit of detection.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Not applicable – no drilling undertaken.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being*	• Not applicable – only surface information available at present, representative photos of sampling provided in text.

Criteria	JORC Code explanation	Commentary
	reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• The objective is lithium in saline groundwater brine • The assays for lithium in salt crusts which were sampled because they are exposed at surface, may be related to lithium contents in saline groundwater at depth • To date no drilling has been done so that it is not known what the relationship between assays for lithium in salt crusts and lithium contents in saline groundwater at depth may be
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• There is lack of published information for Salar Pintados
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Drill testing to obtain samples of saline groundwater brine for assay for lithium and related elements